

# Hoppy Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **3.6**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **23.5 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.5 liter(s)** of strike water to **69.9C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name             | Amount      | Yield | EBC |
|-------|------------------|-------------|-------|-----|
| Grain | Barke Pilsneński | 5 kg (100%) | 81 %  | 4   |

## Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Magnum                | 20 g   | 60 min | 13.5 %     |
| Boil    | Saaz (Czech Republic) | 20 g   | 60 min | 3 %        |
| Boil    | Saaz (Czech Republic) | 30 g   | 20 min | 3 %        |
| Boil    | Styrian Dragon        | 30 g   | 0 min  | 7.3 %      |
| Boil    | Tettnager             | 50 g   | 0 min  | 2.5 %      |
| Boil    | Saaz (Czech Republic) | 50 g   | 0 min  | 3 %        |

## Yeasts

| Name             | Type  | Form  | Amount | Laboratory |
|------------------|-------|-------|--------|------------|
| Saflager W 34/70 | Lager | Slant | 300 ml | Fermentis  |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|             |                  |       |      |        |
|-------------|------------------|-------|------|--------|
| Fining      | Whirlfloc-T      | 2.5 g | Boil | 10 min |
| Water Agent | Calcium Sulphate | 5 g   | Mash | 60 min |
| Water Agent | Lactic Acid      | 5 g   | Mash | 60 min |